Society Reports.

NEW YORK NEUROLOGICAL SOCIETY.

Stated Meeting, held at the New York Academy of Medicine on Tuesday Evening, December 6, 1892.

Dr. William D. Granger reported a case of

ACUTE MANIA, WITH THE ADMINISTRATION OF ENORMOUS DOSES OF PARALDEHYDE.

The patient was a female, aged twenty years; single. She came under Dr. Granger's care July 23, 1891, suffering from acute mania, the attack having begun six months before. It was her second attack, the previous one occurring when she was fifteen years old, and was fully recovered from. There was a history of insanity in her father's family, and her mother is a very nervous woman. The attack of acute mania was of great violence, with pronounced delusions and hallucinations. There was marked insomnia from the first. During her previous illness she was given large doses of paraldehyde, and with the advent of the first symptoms of the second attack the same drug was administered. She was given each night 10 fluid drachms of the drug, in divided doses; and this method of treatment had been kept up for nearly four months. It produced but little sleep, and that was broken. When the patient came under Dr. Granger's care, he found that, in spite of her close confinement and the enormous doses of paraldehyde she was taking, she was showing some evidence of convalescence. She was well nourished and had a good appetite. There was no gastro-intestinal trouble. She had no eruption of the skin. A careful examination failed to reveal any unfavorable symptoms connected with the use of the drug, unless it was that it had lost some of its sleep-producing powers. After the third night, and against the wishes of the family, Dr. Granger determined to rapidly withdraw the drug; and he did so in ten days. After its withdrawal the patient was able to sleep soundly all night. No other drug was substituted. She suffered no inconvenience during the period of its withdrawal. In three months the patient was discharged, and she is to-day perfectly well. No symptoms of the paraldehyde "habit" appeared.

DISCUSSION.

Dr. FREDERICK PETERSON said that he has seen one patient—a woman—who acquired the paraldehyde habit. The last time he heard from her, she was taking about one ounce of the drug nightly, without any bad effect.

Dr. CHARLES L. DANA said he has seen some bad effects from 3 drachm doses of paraldehyde given to an opium-eater. This amount was given in divided doses, and serious collapse followed. He thought that 1 drachm was a sufficiently large dose to start with.

A CONTRIBUTION TO THE ETIOLOGY OF CHOREA.

Dr. CHARLES HENRY BROWN read a paper on this subject. He stated that the mechanism that prompts the peculiar inco-ordinate movements which make up the objective neuro-muscular phenomena of chorea has never been explained, and is to-day as much a mystery as in the time of Sydenham. The recorded pathological evidences serve only to prove that some irritating process has been at work upon the cerebral and spinal motor tracts and co-ordinating adjuncts. The mortality from chorea seems to be greater in Great Britain, and the English observers have given more attention to the gross lesions, which apparently are the result of complications, and which include, chiefly, cardiac valvular troubles and emboli, pericarditis and vaso-motor changes. The reliable accumulated data of the microscopical conditions of the brain and cord are somewhat limited; it however attests that some morbific irritant has been at work. There is, first, hyperæmia; this results in exudates, and is complicated with hyperplasia of connective-tissue elements; this takes place throughout the motor areas, and the end is resolution. The morbific stimuli which incite the nutrient distributors to the motor areas to rebellion and disease must in some way, by natural selection, choose this location.

Dr. Brown then considered some of the more prominent reputed etiological factors of chorea. Among the chief predisposing ones is heredity. Heredity is such a broad subject, and surrounded by so much speculation and mysticism, that no direct information is attainable in half the cases we study. Positive information is rarely obtained. Age is an important, positive, and relative factor. As a rule, chorea is confined to the pre-developing period of manhood and womanhood. The exceptions serve to prove the rule. Sex and pregnancy are also important predisposing factors in the etiology of the disease. Anæmia and mal-nutrition are causes which directly apply, and equally to all correlative affections of chorea. Shock, or sudden fright, Dr. Brown said, he considered a very rare exciting cause of chorea, and he cannot accept the theory that this factor alone can cause the disease. We must accept the fact that chorea is something else than a mere rampant neuro-motor mechanism due to shock or any reflex cause. Dr. C. A. Herter has drawn our attention to the fact that excessive excretion of uric acid was a highly constant feature in pronounced chorea. There was a diminution of the chlorides in relation to urea. The urine in almost every case was of a high specific gravity (1024–1030) and small in amount. Work along this line of investigation will in future be of great importance.

The most common nervous affection of rheumatism, Dr. Brown said, is chorea. The rheumatic diathesis in children is not to be expressed in the same way as in the adult. In the latter it shows more frequent manifestations in the muscles and joints; in childhood it may only be expressed in so-called growing pains, erythema nodosum, slight stiffness, etc. Rheumatism is essentially a disease of the motor apparatus; chorea is a disease of the motor centres. The analogy is interesting. While we recognize that rheumatism often immediately precedes an attack of chorea, there are but few cases observed where the onset of the chorea is immediately followed by an attack of rheumatism. In many cases coming under his observation the rheumatic phenomena, such as articular swellings, exudations and cardiac complications did not make their appearance until months and even years after the chorea. As regards the pathology of rheumatism in children, the articular manifestations are rather a vascular than a parenchymatous process, with little serous exudation. Tissue elements are unaltered and solid products or pus are rare. Reabsorption is complete and no traces are left. Visceral complications suggest similar reflections. As Fernet says: "Touching without profoundly modifying; rarely leading to organic changes." Chorea is rarely associated with rheumatism in the adult.

Dr. Brown gave the history of an interesting case of chorea in a child eleven years of age. The patient was covered with about 150 (actual count) little tumors, from the occiput to the extremities. They varied in size from that of the head of an ordinary pin to a good sized almond. Most of them were of the size of a small pea. They varied in consistency. Some were firm to the touch, but most of them were quite soft. Under the microscope they were found to consist of young granulating connective tissue. Some were immediately associated with the skin; others were below in the connective tissue. A photograph was presented, showing the distribution of the subcutaneous nodules.

It is an admitted fact by the English observers, Dr. Brown said, that the subcutaneous nodule is always accompanied by rheumatism and no other disease. If it is present, it is associated with other rheumatic phenomena, either articular swellings, cardiac lesions, or chorea. In the majority of cases on record there is associated all three correlative phenomena. Pathologically, the subcutaneous nodule is an exudate and connective-tissue hyperplasia, with abundant vascular supply. In this nodule we have the key to a homologous exudate and connective-tissue hyperplasia that composes the fibrinous nodules on the valves and also the little colloid and hyaline bodies found in the choreic brain.

Until we can solve the nature of rheumatism, that of chorea will be mysterious. Blake writes of a supræmic origin of rheumatism. Distemper causes chorea in dogs. Chorea has also lately been transmitted by inoculation from one dog to another.

In conclusion, Dr. Brown said that while he does not claim that the rheumatic poison is always the cause of chorea, yet, as it is the most common cause of joint affections and is always the cause of the subcutaneous nodule, and as chorea is so intimately associated with these nodules, a relation to rheumatism exists which is much more common than is generally accorded.

DISCUSSION.

Dr. Sachs said he never saw a case of chorea associated with these subcutaneous nodules. He objected to making this symptom an etiological factor in chorea, on account of its extreme rarity.

Dr. Brown said: The subcutaneous nodule was rare in this country—quite common in England. He had seen, however, three cases since this one. He had no doubt but it would be more frequently seen if understood. He did not claim it as an etiological factor of chorea. It was associated with rheumatism, and was an exudate. It was original, however, as far as he knew, to compare the hyaline exudates, pathologically seen in cases reported in the choreic brain, to the exudate, so-called the subcutaneous nodule.

Dr. J. Arthur Booth reported a case of

TUMOR OF LEFT FRONTAL LOBE OF BRAIN.—OPERATION.—RECOVERY.

The patient was a male, aged twenty-four; single. He had hip-joint trouble since childhood. Aside from this he enjoyed fair health until eighteen months ago, when he commenced to have epileptic attacks, general in their character. There is no history of any attack of hemi-spasm, or any limited to a single group of muscles, although the patient's brother thinks that the jerking was more marked in the right arm. The last attack was in June; and in this one he fell, striking the chin and left side of the head quite severely. Shortly after this his relatives noticed for the first time the swelling on the left temple, the patient himself stating that it was there before the fall. About the same time failure of vision became a marked symptom. The patient was also troubled by a turning in of the left eye. No history of hemianopsia. During the last month he had what he designated as fainting-spells, in which there were no convulsive movements. For the past year he has had a good deal of headache of a severe character, chiefly in the forehead, through the temples, and often radiating back as far as the occiput. He has never vomited. His memory failed very much during the past year, and he now finds it difficult to recall recent events and the names of those with whom he is well acquainted. There has been a marked change in his manner; he is dull and not inclined to talk. There is no history of injury to the head other than the one mentioned above. He confesses to two attacks of gonorrhœa; denies syphilis. His parents are both alive and healthy. There is no history of phthisis in the family.

Examination.—Manner quiet; face rather expressionless; speech slow and somewhat uncertain, though there is no marked aphasia; tongue straight and clean; there is no decided paresis of the face, but there is less expression on the right side than on the left; paresis of the right external rectus; pupils widely dilated; no reaction to light or accommodation; vision very much reduced in both eyes, the left being the weaker; there is marked optic neuritis of both nerves, with numerous small hemorrhages; stands fairly well with eyes closed; no ataxia; knee-jerks absent even with re-enforcement; no anæsthesia or analgesia; sense of taste normal; sense of smell very deficient on left side; on the left temple, just back of the external angular process of the frontal bone, there was quite a prominent swelling, oval in shape, somewhat tender, pressure on it causing pain to radiate through the head as far back as the occiput; deep pressure at the base of the tumor shows absence of bone at that point.

These symptoms, Dr. Booth said, were considered sufficient to warrant the diagnosis of an intra-cranial tumor, and its location in the anterior fossa, or, more definitely, in the left frontal lobe. The patient was referred to Dr. B. F. Curtis, who concurred in the diagnosis, and advised surgical operation. Dr. C. L. Dana, who saw the patient at this time, also concurred in this opinion. The operation was performed, on September 30th, by Dr. Curtis at St. Luke's Hospital. The tumor was exposed, and was found to be covered by a tough soft red membrane, containing a cheesy material, which was removed with a spoon. The circular opening in the bone was found to be one inch in diameter, and the dura mater enclosed the opening. The opening in the bone was enlarged and the dura mater separated from the roof of the orbit, where the tumor was adherent and had caused absorption of the bone. The dura mater was now opened and the tumor enucleated with the finger. There was no shock following the operation; the patient slept well during the night, and the next day talked as well as before the operation. On October 6th an examination of the eyes showed extensive hemorrhages occupying the entire right retina and two-thirds of the left. No perception of light. On October 16th sight was suddenly recovered to some extent in the left eye. On October 22d the patient had a general epileptic attack, and after this again became blind, remaining so up to date. An examination of the eyes on November 3d revealed choked disc in atrophic stage in both eyes.

The healing of the wound was delayed by a tubercular infection, but is now well. Unfortunately, the patient is entirely blind; but this condition was not unexpected, owing to the high degree of neuritis present before the operation. On this account it is to be regretted that the patient did not come under observation at an earlier date.

DISCUSSION.

Dr. B. FARQUHAR CURTIS, who performed the operation, stated that it was carried out in an exploratory way. The bone was cut away until the limits of the tumor could be felt on all sides before the dura was incised. Although the operation lasted over two hours, there was hardly any shock and very little blood lost. The slight hemorrhage was probably due to the fact that the growth was a tubercular one.

Dr. DAVID WEBSTER said that he examined the patient's eyes before the operation, and observed a high degree of choked disc. The optic nerves were much swollen, and sight was very much impaired, the patient being unable to count fingers with certainty. He was of the opinion that the removal of the tumor had nothing to do with accelerating the blindness in this case; the temporary recovery of the sight some days after the operation showed this. The total loss of vision was due to the natural progress of the disease of the optic nerves—probably complete atrophy.

Dr. B. SACHS referred to the psychical changes in connection with frontal tumors. Experiments on dogs have shown that when the frontal lobe is removed, either entirely or in part, the animals invariably became idiotic, as was inferred from the changes in their actions. In man also many cases have been reported wherein affections of the frontal lobe were followed by marked psychical changes. Dr. Sachs said he saw one case, however, where the autopsy revealed a very large tumor in the frontal region, and in that case there had been no change at all in the person's manner, etc. The value of this symptom, then, still seems to be an open question. In tumors of a tubercular nature, Dr. Sachs said, we cannot hope to do much by operative procedures. It is questionable whether we can prolong the patient's life by such an operation. In the case reported, of course, the tumor was situated so near the surface that the wisdom of its removal was manifest.

Dr. HERTER referred to the fact that in this class of tumors we usually have to deal with multiple growths, and there is always much danger of recurrence. He has seen one case of abscess of the frontal lobe, almost destroying the entire lobe, without any change in the patient's character. The presence of the abscess was not even suspected.

Dr. J. F. TERRIBERRY said that in one case of frontal tumor coming under his observation, in which the growth involved the middle of the anterior portion of both lobes, there were decided psychical phenomena manifested. The patient, who was a man of intelligence, lost all interest in his business, became careless about his diet, habits, etc.

Dr. M. ALLEN STARR referred to a case where a large tumor was removed from the frontal lobe. The growth was followed by decided mental symptoms, which proved of great aid in its localization. These mental symptoms appeared from the very first. There was slight aphasia and paralysis on the right side. In twenty-six cases of frontal lobe lesion, fifteen showed very marked psychical symptoms. Dr. Starr said that the majority of cases of frontal lesions, collected by him since 1884, showed the existence of psychical symptoms. In those cases in which the left frontal lobe was invaded, the proportion in which mental symptoms were present seems to be higher than where the right lobe was invaded.

Dr. BOOTH, in closing the discussion, stated that when we have a tumor creating pressure, which can be localized and removed—whether the growth be of a tubercular nature, or otherwise—he thought it ought to be removed.

DISCUSSION ON THE DIAGNOSTIC SIGNIFICANCE OF TREMOR.

Dr. C. L. DANA, who opened the discussion, stated that his data was obtained from studying twenty-six cases of tremor in various forms of nervous diseases, assisted by sphygmographic tracings procured by the method recommended by Dr. Peterson. When we come to study tremors, we find that they differ in regard to rate, and in regard to form and amplification. Also, as to whether they are continuous or not, and as to where they are located. As regards their rate, there are two kinds, the fine and the coarse. The French also include a tremor of median rate—between the fine and the coarse. In the fine tremor the number of vibrations are from 8 to 12 per second, and in the coarse they are about one-half this number, ranging between 3½ and 5½. As regards the form, amplification, etc., we have perhaps three different kinds. The vibratory, in which the arm or extremity shakes as a whole; the segmental or oscillatory, in which a single segment is moved; and the jerky, which is rather an inco-ordinate movement. Most writers on this subject divide tremors into the intentional tremors, and those more or less continuous. It is hard to make this distinction in actual cases. We may call those the continuous tremors which continue nearly all the time, such as we get in nervous excitement and neurasthenia. Then we have the intermittent tremor, which stops when the hand is at rest or when it is moved, as in paralysis agitans. Then we have one that is intermittent and intentional; that is to say, it is only brought out by voluntary movements of the hand. They may be increased by tension or rather extension of the extremity. They may be greatest when the limb is at rest, as in acute alcoholism and paralysis agitans. Some become more pronounced on voluntary motion, as in certain scleroses. As a rule, the distribution of the tremor is of particular importance. We have those of the extremity, of the chin, the eyes, etc. With regard to the diagnostic significance of these various tremors, Dr. Dana said we cannot exactly assign to each of them a particular clinical character. In acquired neuroses and cortical neuroses, like general paresis, a fine vibratory tremor, practically continuous, is present, involving a large part of the body and both sides of the face. The rate is from 8 to 12 per second. In alcoholism there is a great difference of opinion as to the rate of the tremor. Dr. Peterson states that in delirium tremens it is as slow as 6 per second. Most French writers state that it is a fine tremor in these cases. In the degenerative neuroses the tremor is a coarse one, segmented and intermittent. It usually affects one-half of the body more than the other. The rate is from 3½ to 6½ per second. In paralysis agitans the rate is about 5 per second. Senile tremor, Dr. Dana said, is, in his opinion, only an irregular form of paralysis agitans. In the organic nervous diseases the tremor is coarse, jerky, intermittent, usually intentional, and confined to certain segments or limbs.

Dr. FREDERICK PETERSON presented a number of kymographic tracings, representing tremors in various forms of nervous diseases. In early alcoholism, Dr. Peterson said, the rate of tremor is about 10 per second, but in delirium tremens it becomes coarse.

Dr. LANDON CARTER GRAY said that the accurate tracings made by the kymograph are of great value in the diagnosis of the different forms of tremor. He has thus far been baffled in trying to find out with absolute certainty the characteristics of the various forms of tremor—excepting that we get in paralysis agitans. There are so many exceptions to the rule of obtaining an intentional tremor in disseminated sclerosis that it is a poor reed to lean upon.

Dr. SACHS said he had always considered facial tremor as characteristic of either alcoholism or of general paresis, but recently he has seen a number of cases of general neurasthenic disturbance in which a distinct facial tremor was present.

Dr. GRAY said he thought facial tremor is an indication of general paresis in the vast majority of cases, but we should not attach too much importance to this symptom. He has observed it in neurasthenia as well as in other conditions.

Dr. E. D. FISHER said that he has seen a facial tremor in dementia, or in dementia following mania. Also in chronic alcoholism. He considered it a valuable sign, but one that could not be absolutely depended upon.

Dr. GRAY stated that in one case of syphilis of the nervous system—mainly of the cord—the facial tremor had been very marked.

Dr. LESZYNSKY said he has observed a facial tremor in a patient suffering from tobacco poisoning. Also in cases of insanity not associated with general paresis or alcoholism.

Dr. ROCKWELL said he recently saw a case of tremor of traumatic origin. The patient had received a severe injury, which resulted in paralysis from which she quickly recovered. Subsequent to the paralysis she suffered from a tremor which he decided was due to the accident.

Dr. MARY PUTNAM JACOBI suggested that the tremor might have been due to traumatic hysteria.

Dr. GRANGER said that facial tremors are seen so frequently in the insane that they excite no comment whatever. They are extremely common in dementia—a very coarse tremor. In acute mania there is a very fine tremor like that in general paresis. In general paresis, however, we may find all sorts of tremors, from the finest to the coarsest. By itself, it is simply suggestive of the disease, and we must look for other symptoms.

Dr. PETERSON said he has seen a number of cases of neurasthenia in which the facial tremor was present; he has also observed it in diffuse syphilis of the central nervous system.

Dr. STARR confirmed the statement that tremor of the face is not very infrequent in severe types of neurasthenia, and that it is not to be relied upon as a diagnostic symptom of general paresis.

Dr. DANA, in closing the discussion, said that it is very rare indeed to get a facial tremor in any case of neurasthenia, no matter how severe, when there is no tension of the facial muscles; that is, when the muscles are at rest. A tremor of the lips, for instance, without any tension of the muscles, he would certainly consider as an evidence of serious trouble.

PHILADELPHIA NEUROLOGICAL SOCIETY.

Stated Meeting, October 24, 1892.

The President, Dr. FRANCIS X. DERCUM, in the chair.

Dr. WM. H. MORRISON read a paper entitled

REPORT OF A CASE OF LARGE INTRA-CRANIAL TUMOR (WEIGHING FIVE OUNCES) COMPRESSING THE LEFT FRONTAL LOBE.

A. C., colored, about forty years of age, came under the author's observation in April, 1886. At this time he was a coachman by occupation, but had been in the army and had also served as a sailor, and was said to have suffered shipwreck on one or two occasions. He complained of pains in the head, which were attributed to localized syphilitic meningitis, and he was placed upon iodide of potassium. He soon passed from the author's observation, and was not seen again until two days before death. In the summer of 1888 he had an epileptiform convulsion, which was the only convulsion in the history of the case. The pains in the head returned and increased